

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/088, 567 A  
Source: IFWO  
Date Processed by STIC: 03/14/2006

***ENTERED***



IFWO

**RAW SEQUENCE LISTING** DATE: 03/14/2006  
 PATENT APPLICATION: US/10/088,567A TIME: 10:54:35

Input Set : A:\31671178.APP  
 Output Set: N:\CRF4\03142006\J088567A.raw

```

3 <110> APPLICANT: AKIRA, SHIZUO
4       HEMMI, HIROAKI
6 <120> TITLE OF INVENTION: RECEPTOR PROTEINS SPECIFICALLY RECOGNIZING BACTERIAL
7       DNA
9 <130> FILE REFERENCE: 31671-178057
11 <140> CURRENT APPLICATION NUMBER: 10/088,567A
12 <141> CURRENT FILING DATE: 2002-03-19
14 <150> PRIOR APPLICATION NUMBER: PCT/JP01/04731
15 <151> PRIOR FILING DATE: 2001-06-05
17 <150> PRIOR APPLICATION NUMBER: JP 2000-219652
18 <151> PRIOR FILING DATE: 2000-07-19
20 <160> NUMBER OF SEQ ID NOS: 9
22 <170> SOFTWARE: PatentIn Ver. 3.3
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 3257
26 <212> TYPE: DNA
27 <213> ORGANISM: Homo sapiens
29 <220> FEATURE:
30 <221> NAME/KEY: CDS
31 <222> LOCATION: (107)..(3205)
33 <400> SEQUENCE: 1
34 ccgctgctgc ccctgtggaa agggacctcg agtgtgaagc atccttcctt gtagctgctg 60
36 tccagtctgc cccgcagacc ctctggagaa gcccctgccc cccagc atg ggt ttc 115
37                               Met Gly Phe
38
40 tgc cgc agc gcc ctg cac ccg ctg tct ctc ctg gtg cag gcc atc atg 163
41 Cys Arg Ser Ala Leu His Pro Leu Ser Leu Leu Val Gln Ala Ile Met
42      5          10           15
44 ctg gcc atg acc ctg gcc ctg ggt acc ttg cct gcc ttc cta ccc tgt 211
45 Leu Ala Met Thr Leu Ala Leu Gly Thr Leu Pro Ala Phe Leu Pro Cys
46   20          25           30           35
48 gag ctc cag ccc cac ggc ctg gtg aac tgc aac tgg ctg ttc ctg aag 259
49 Glu Leu Gln Pro His Gly Leu Val Asn Cys Asn Trp Leu Phe Leu Lys
50      40          45           50
52 tct gtg ccc cac ttc tcc atg gca gca ccc cgt qgc aat gtc acc agc 307
53 Ser Val Pro His Phe Ser Met Ala Ala Pro Arg Gly Asn Val Thr Ser
54      55          60           65
56 ctt tcc ttg tcc aac cgc atc cac cac ctc cat gat tct gac ttt 355
57 Leu Ser Leu Ser Asn Arg Ile His His Leu His Asp Ser Asp Phe
58      70          75           80
60 gcc cac ctg ccc agc ctg cgg cat ctc aac ctc aag tgg aac tgc ccg 403
61 Ala His Leu Pro Ser Leu Arg His Leu Asn Leu Lys Trp Asn Cys Pro
62      85          90           95
  
```

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/10/088,567A**

**DATE: 03/14/2006**  
**TIME: 10:54:35**

**Input Set : A:\31671178.APP**  
**Output Set: N:\CRF4\03142006\J088567A.raw**

64 ccg gtt ggc ctc agc ccc atg cac ttc ccc tgc cac atg acc atc gag	451
65 Pro Val Gly Leu Ser Pro Met His Phe Pro Cys His Met Thr Ile Glu	
66 100 105 110 115	
68 ccc agc acc ttc ttg gct gtg ccc acc ctg gaa gag cta aac ctg agc	499
69 Pro Ser Thr Phe Leu Ala Val Pro Thr Leu Glu Glu Leu Asn Leu Ser	
70 120 125 130	
72 tac aac aac atc atg act gtg cct gcg ctg ccc aaa tcc ctc ata tcc	547
73 Tyr Asn Asn Ile Met Thr Val Pro Ala Leu Pro Lys Ser Leu Ile Ser	
74 135 140 145	
76 ctg tcc ctc agc cat acc aac atc ctg atg cta gac tct gcc agc ctc	595
77 Leu Ser Leu Ser His Thr Asn Ile Leu Met Leu Asp Ser Ala Ser Leu	
78 150 155 160	
80 gcc ggc ctg cat gcc ctg cgc ttc cta ttc atg gac ggc aac tgt tat	643
81 Ala Gly Leu His Ala Leu Arg Phe Leu Phe Met Asp Gly Asn Cys Tyr	
82 165 170 175	
84 tac aag aac ccc tgc agg cag gca ctg gag gtg gcc ccg ggt gcc ctc	691
85 Tyr Lys Asn Pro Cys Arg Gln Ala Leu Glu Val Ala Pro Gly Ala Leu	
86 180 185 190 195	
88 ctt ggc ctg ggc aac ctc acc cac ctg tca ctc aag tac aac aac ctc	739
89 Leu Gly Leu Gly Asn Leu Thr His Leu Ser Leu Lys Tyr Asn Asn Leu	
90 200 205 210	
92 act gtg gtg ccc cgc aac ctg cct tcc agc ctg gag tat ctg ctg ttg	787
93 Thr Val Val Pro Arg Asn Leu Pro Ser Ser Leu Glu Tyr Leu Leu	
94 215 220 225	
96 tcc tac aac cgc atc gtc aaa ctg gcg cct gag gac ctg gcc aat ctg	835
97 Ser Tyr Asn Arg Ile Val Lys Leu Ala Pro Glu Asp Leu Ala Asn Leu	
98 230 235 240	
100 acc gcc ctg cgt gtg ctc gat gtg ggc gga aat tgc cgc cgc tgc gac	883
101 Thr Ala Leu Arg Val Leu Asp Val Gly Gly Asn Cys Arg Arg Cys Asp	
102 245 250 255	
104 cac gct ccc aac ccc tgc atg gag tgc cct cgt cac ttc ccc cag cta	931
105 His Ala Pro Asn Pro Cys Met Glu Cys Pro Arg His Phe Pro Gln Leu	
106 260 265 270 275	
108 cat ccc gat acc ttc agc cac ctg agc cgt ctt gaa ggc ctg gtg ttg	979
109 His Pro Asp Thr Phe Ser His Leu Ser Arg Leu Glu Gly Leu Val Leu	
110 280 285 290	
112 aag gac agt tct ctc tcc tgg ctg aat gcc agt tgg ttc cgt ggg ctg	1027
113 Lys Asp Ser Ser Leu Ser Trp Leu Asn Ala Ser Trp Phe Arg Gly Leu	
114 295 300 305	
116 gga aac ctc cga gtg ctg gac ctg agt gag aac ttc ctc tac aaa tgc	1075
117 Gly Asn Leu Arg Val Leu Asp Leu Ser Glu Asn Phe Leu Tyr Lys Cys	
118 310 315 320	
120 atc act aaa acc aag gcc ttc cag ggc cta aca cag ctg cgc aag ctt	1123
121 Ile Thr Lys Thr Lys Ala Phe Gln Gly Leu Thr Gln Leu Arg Lys Leu	
122 325 330 335	
124 aac ctg tcc ttc aat tac caa aag agg gtg tcc ttt gcc cac ctg tct	1171
125 Asn Leu Ser Phe Asn Tyr Gln Lys Arg Val Ser Phe Ala His Leu Ser	
126 340 345 350 355	
128 ctg gcc cct tcc ttc ggg agc ctg gtc gcc ctg aag gag ctg gac atg	1219

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/10/088,567A**

**DATE: 03/14/2006**  
**TIME: 10:54:35**

**Input Set : A:\31671178.APP**  
**Output Set: N:\CRF4\03142006\J088567A.raw**

129 Leu Ala Pro Ser Phe Gly Ser Leu Val Ala Leu Lys Glu Leu Asp Met			
130 360	365	370	
132 cac ggc atc ttc ttc cgc tca ctc gat gag acc acg ctc cgg cca ctg	1267		
133 His Gly Ile Phe Phe Arg Ser Leu Asp Glu Thr Thr Leu Arg Pro Leu			
134 375	380	385	
136 gcc cgc ctg ccc atg ctc cag act ctg cgt ctg cag atg aac ttc atc	1315		
137 Ala Arg Leu Pro Met Leu Gln Thr Leu Arg Leu Gln Met Asn Phe Ile			
138 390	395	400	
140 aac cag gcc cag ctc ggc atc ttc agg gcc ttc cct ggc ctg cgc tac	1363		
141 Asn Gln Ala Gln Leu Gly Ile Phe Arg Ala Phe Pro Gly Leu Arg Tyr			
142 405	410	415	
144 gtg gac ctg tcg gac aac cgc atc agc gga gct tcg gag ctg aca gcc	1411		
145 Val Asp Leu Ser Asp Asn Arg Ile Ser Gly Ala Ser Glu Leu Thr Ala			
146 420	425	430	435
148 acc atg ggg gag gca gat gga ggg gag aag gtc tgg ctg cag cct ggg	1459		
149 Thr Met Gly Glu Ala Asp Gly Gly Glu Lys Val Trp Leu Gln Pro Gly			
150 440	445	450	
152 gac ctt gct ccg gcc cca gtg gac act ccc agc tct gaa gac ttc agg	1507		
153 Asp Leu Ala Pro Ala Pro Val Asp Thr Pro Ser Ser Glu Asp Phe Arg			
154 455	460	465	
156 ccc aac tgc agc acc ctc aac ttc acc ttg gat ctg tca cgg aac aac	1555		
157 Pro Asn Cys Ser Thr Leu Asn Phe Thr Leu Asp Leu Ser Arg Asn Asn			
158 470	475	480	
160 ctg gtg acc gtg cag ccg gag atg ttt gcc cag ctc tcg cac ctg cag	1603		
161 Leu Val Thr Val Gln Pro Glu Met Phe Ala Gln Leu Ser His Leu Gln			
162 485	490	495	
164 tgc ctg cgc ctg agc cac aac tgc atc tcg cag gca gtc aat ggc tcc	1651		
165 Cys Leu Arg Leu Ser His Asn Cys Ile Ser Gln Ala Val Asn Gly Ser			
166 500	505	510	515
168 cag ttc ctg ccg ctg acc ggt ctg cag gtg cta gac ctg tcc cac aat	1699		
169 Gln Phe Leu Pro Leu Thr Gly Leu Gln Val Leu Asp Leu Ser His Asn			
170 520	525	530	
172 aag ctg gac ctc tac cac gag cac tca ttc acg gag cta cca cga ctg	1747		
173 Lys Leu Asp Leu Tyr His Glu His Ser Phe Thr Glu Leu Pro Arg Leu			
174 535	540	545	
176 gag gcc ctg gac ctc agc tac aac agc cag ccc ttt ggc atg cag ggc	1795		
177 Glu Ala Leu Asp Leu Ser Tyr Asn Ser Gln Pro Phe Gly Met Gln Gly			
178 550	555	560	
180 gtg ggc cac aac ttc agc ttc gtg gct cac ctg cgc acc ctg cgc cac	1843		
181 Val Gly His Asn Phe Ser Phe Val Ala His Leu Arg Thr Leu Arg His			
182 565	570	575	
184 ctc agc ctg gcc cac aac aac atc cac agc caa gtg tcc cag cag ctc	1891		
185 Leu Ser Leu Ala His Asn Asn Ile His Ser Gln Val Ser Gln Gln Leu			
186 580	585	590	595
188 tgc agt acg tcg ctg cgg gcc ctg gac ttc agc ggc aat gca ctg ggc	1939		
189 Cys Ser Thr Ser Leu Arg Ala Leu Asp Phe Ser Gly Asn Ala Leu Gly			
190 600	605	610	
192 cat atg tgg gcc gag gga gac ctc tat ctg cac ttc ttc caa ggc ctg	1987		
193 His Met Trp Ala Glu Gly Asp Leu Tyr Leu His Phe Phe Gln Gly Leu			

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/10/088,567A**

**DATE: 03/14/2006**  
**TIME: 10:54:35**

**Input Set : A:\31671178.APP**  
**Output Set: N:\CRF4\03142006\J088567A.raw**

194	615	620	625	
196	agc ggt ttg atc tgg ctg gac ttg tcc cag aac cgc ctg cac acc ctc			2035
197	Ser Gly Leu Ile Trp Leu Asp Leu Ser Gln Asn Arg Leu His Thr Leu			
198	630	635	640	
200	ctg ccc caa acc ctg cgc aac ctc ccc aag agc cta cag gtg ctg cgt			2083
201	Leu Pro Gln Thr Leu Arg Asn Leu Pro Lys Ser Leu Gln Val Leu Arg			
202	645	650	655	
204	ctc cgt gac aat tac ctg gcc ttc ttt aag tgg tgg agc ctc cac ttc			2131
205	Leu Arg Asp Asn Tyr Leu Ala Phe Phe Lys Trp Trp Ser Leu His Phe			
206	660	665	670	675
208	ctg ccc aaa ctg gaa gtc ctc gac ctg gca gga aac cag ctg aag gcc			2179
209	Leu Pro Lys Leu Glu Val Leu Asp Leu Ala Gly Asn Gln Leu Lys Ala			
210	680	685	690	
212	ctg acc aat ggc agc ctg cct gct ggc acc cgg ctc cgg agg ctg gat			2227
213	Leu Thr Asn Gly Ser Leu Pro Ala Gly Thr Arg Leu Arg Arg Leu Asp			
214	695	700	705	
216	gtc agc tgc aac agc atc agc ttc gtg gcc ccc ggc ttc ttt tcc aag			2275
217	Val Ser Cys Asn Ser Ile Ser Phe Val Ala Pro Gly Phe Phe Ser Lys			
218	710	715	720	
220	gcc aag gag ctg cga gag ctc aac ctt agc gcc aac gcc ctc aag aca			2323
221	Ala Lys Glu Leu Arg Glu Leu Asn Leu Ser Ala Asn Ala Leu Lys Thr			
222	725	730	735	
224	gtg gac cac tcc tgg ttt ggg ccc ctg gcg agt gcc ctg caa ata cta			2371
225	Val Asp His Ser Trp Phe Gly Pro Leu Ala Ser Ala Leu Gln Ile Leu			
226	740	745	750	755
228	gat gta agc gcc aac cct ctg cac tgc gcc tgt ggg gcg gcc ttt atg			2419
229	Asp Val Ser Ala Asn Pro Leu His Cys Ala Cys Gly Ala Ala Phe Met			
230	760	765	770	
232	gac ttc ctg ctg gag gtg cag gct gcc gtg ccc ggt ctg ccc agc cgg			2467
233	Asp Phe Leu Leu Glu Val Gln Ala Ala Val Pro Gly Leu Pro Ser Arg			
234	775	780	785	
236	gtg aag tgt ggc agt ccg ggc cag ctc cag ggc ctc agc atc ttt gca			2515
237	Val Lys Cys Gly Ser Pro Gly Gln Leu Gln Gly Leu Ser Ile Phe Ala			
238	790	795	800	
240	cag gac ctg cgc ctc tgc ctg gat gag gcc ctc tcc tgg gac tgt ttc			2563
241	Gln Asp Leu Arg Leu Cys Leu Asp Glu Ala Leu Ser Trp Asp Cys Phe			
242	805	810	815	
244	gcc ctc tcg ctg gct gtg gct ctg ggc ctg ggt gtg ccc atg ctg			2611
245	Ala Leu Ser Leu Leu Ala Val Ala Leu Gly Leu Gly Val Pro Met Leu			
246	820	825	830	835
248	cat cac ctc tgt ggc tgg gac ctc tgg tac tgc ttc cac ctg tgc ctg			2659
249	His His Leu Cys Gly Trp Asp Leu Trp Tyr Cys Phe His Leu Cys Leu			
250	840	845	850	
252	gcc tgg ctt ccc tgg cgg ggg cgg caa agt ggg cga gat gag gat gcc			2707
253	Ala Trp Leu Pro Trp Arg Gly Arg Gln Ser Gly Arg Asp Glu Asp Ala			
254	855	860	865	
256	ctg ccc tac gat gcc ttc gtg gtc ttc gac aaa acg cag agc gca gtg			2755
257	Leu Pro Tyr Asp Ala Phe Val Val Phe Asp Lys Thr Gln Ser Ala Val			
258	870	875	880	

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/088,567A

DATE: 03/14/2006  
TIME: 10:54:35

Input Set : A:\31671178.APP  
Output Set: N:\CRF4\03142006\J088567A.raw

260	gca	gac	tgg	gtg	tac	aac	gag	ctt	cgg	ggg	cag	ctg	gag	gag	tgc	cgt	2803
261	Ala	Asp	Trp	Val	Tyr	Asn	Glu	Leu	Arg	Gly	Gln	Leu	Glu	Glu	Cys	Arg	
262	885			890							895						
264	ggg	cgc	tgg	gca	ctc	cgc	ctg	tgc	ctg	gag	gaa	cgc	gac	tgg	ctg	cct	2851
265	Gly	Arg	Trp	Ala	Leu	Arg	Leu	Cys	Leu	Glu	Glu	Arg	Asp	Trp	Leu	Pro	
266	900			905						910			915				
268	ggc	aaa	acc	ctc	ttt	gag	aac	ctg	tgg	gcc	tcg	gtc	tat	ggc	agc	cgc	2899
269	Gly	Lys	Thr	Leu	Phe	Glu	Asn	Leu	Trp	Ala	Ser	Val	Tyr	Gly	Ser	Arg	
270										920		925		930			
272	aag	acg	ctg	ttt	gtg	ctg	gcc	cac	acg	gac	cgg	gtc	agt	ggt	ctc	ttg	2947
273	Lys	Thr	Leu	Phe	Val	Leu	Ala	His	Thr	Asp	Arg	Val	Ser	Gly	Leu	Leu	
274										935		940		945			
276	cgc	gcc	agc	ttc	ctg	ctg	gcc	cag	cag	cgc	ctg	ctg	gag	gac	cgc	aag	2995
277	Arg	Ala	Ser	Phe	Leu	Leu	Ala	Gln	Gln	Arg	Leu	Leu	Glu	Asp	Arg	Lys	
278								950		955		960					
280	gac	gtc	gtg	gtg	ctg	gtg	atc	ctg	agt	gac	ggc	cgc	cgc	tcc	cgc	3043	
281	Asp	Val	Val	Val	Leu	Val	Ile	Leu	Ser	Pro	Asp	Gly	Arg	Arg	Ser	Arg	
282							965		970		975						
284	tac	gtg	cgg	ctg	cgc	cag	cgc	ctc	tgc	cgc	cag	agt	gtc	ctc	ctc	tgg	3091
285	Tyr	Val	Arg	Leu	Arg	Gln	Arg	Leu	Cys	Arg	Gln	Ser	Val	Leu	Leu	Trp	
286						980		985		990		995					
288	ccc	cac	cag	ccc	agt	gtt	cag	cgc	agc	tcc	tgg	gcc	cag	ctg	ggc	atg	3139
289	Pro	His	Gln	Pro	Ser	Gly	Gln	Arg	Ser	Phe	Trp	Ala	Gln	Leu	Gly	Met	
290						1000			1005			1010					
292	gcc	ctg	acc	agg	gac	aac	cac	cac	ttc	tat	aac	cgg	aac	ttc	tgc	cag	3187
293	Ala	Leu	Thr	Arg	Asp	Asn	His	His	Phe	Tyr	Asn	Arg	Asn	Phe	Cys	Gln	
294						1015			1020			1025					
296	gga	ccc	acg	gcc	gaa	tag	ccgtgagccg	gaatcctgca	cggtgccacc							3235	
297	Gly	Pro	Thr	Ala	Glu												
298				1030													
300	tccacactca	cctcacctct	gc													3257	
303	<210>	SEQ_ID	NO:	2													
304	<211>	LENGTH:	1032														
305	<212>	TYPE:	PRT														
306	<213>	ORGANISM:	Homo sapiens														
308	<400>	SEQUENCE:	2														
309	Met	Gly	Phe	Cys	Arg	Ser	Ala	Leu	His	Pro	Leu	Ser	Leu	Leu	Val	Gln	
310	1				5					10				15			
312	Ala	Ile	Met	Leu	Ala	Met	Thr	Leu	Ala	Leu	Gly	Thr	Leu	Pro	Ala	Phe	
313						20				25			30				
315	Leu	Pro	Cys	Glu	Leu	Gln	Pro	His	Gly	Leu	Val	Asn	Cys	Asn	Trp	Leu	
316						35			40			45					
318	Phe	Leu	Lys	Ser	Val	Pro	His	Phe	Ser	Met	Ala	Ala	Pro	Arg	Gly	Asn	
319						50			55			60					
321	Val	Thr	Ser	Leu	Ser	Leu	Ser	Ser	Asn	Arg	Ile	His	His	Leu	His	Asp	
322						65			70			75			80		
324	Ser	Asp	Phe	Ala	His	Leu	Pro	Ser	Leu	Arg	His	Leu	Asn	Leu	Lys	Trp	
325						85			90			95					
327	Asn	Cys	Pro	Pro	Val	Gly	Leu	Ser	Pro	Met	His	Phe	Pro	Cys	His	Met	

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/088,567A

DATE: 03/14/2006

TIME: 10:54:36

Input Set : A:\31671178.APP

Output Set: N:\CRF4\03142006\J088567A.raw